

## Document Management

Document management should be considered a cradle to grave solution for documents. To understand this in its simplest terms, documents must be captured, distributed and archived. Traditional document management follows a primitive, expensive and inefficient process. First documents are created electronically and then printed. Once printed, they are distributed by any number of styles. The following are traditional approaches; mailed, faxed, emailed, hand delivery, courier delivery, overnight delivery, etc.

All of these methods become part of a workflow that is part of a business's fabric. As documents work their way through this workflow, many opportunities for waste becomes inherent to the process. Besides the time that it takes for people to prepare and move these documents, opportunities for documents to get lost or misplaced becomes common place. Once this happens, recreation is required at an enormous cost. National consultancies such as the Gartner Group estimate this cost at between \$120 to \$230 per document depending on whether it has to be created or just found. Either way, considering that 15% of documents wind up one of these two ways, document distribution is an expensive proposition in the document management process.

Finally, documents get to their final destination which is either destroyed or archived for future use. The traditional archiving of documents is the use of file cabinets and boxes. The first stop in the archival process is usually a file cabinet. These are documents that were created recently and have a likely chance to be required again. If needed, they are logically placed in some type of order for retrieval. Overtime, as these documents age, they are purged and moved into cardboard boxes for long term storage. Many times these documents are rarely needed so businesses offload these boxes to long term storage facilities until the unlikely event they are needed. These storage companies charge storage fees monthly, as well as retrieval fees, destruction fees and other fees to terminate the storage of the boxed document.

Computers have given rise to an enormous ability to create documents. The simplicity of the creation process has caused the need for more efficient methods to manage these documents. Although incredible electronic methods have emerged to manage these documents, rarely do businesses invest in the technology to do so. Most of the investment has been in the creation side of the document, rather than the distribution, archival and retrieval.

## Printing

Once a document has been created, if needed in print, this becomes the first highly wasted part of the document workflow process. Many forms of printing take place at a tremendous cost to a company. Analysis shows that somewhere between one and six percent of a company's top line revenue is spent on printing in its various forms. Outside of payroll, it can be one of the largest expense line items. The short run printing or convenience printing is usually produced on one of three different types of devices.

## Local Printers

The first and most expensive printer on a per page basis is the "Ink Jet". These prints can range from five cents to fifty cents per page depending on the device. The cost of one gallon of this ink, if you could purchase it that way, costs up to \$3,200. Manufacturers produce low cost printers to promote the usage of this highly profitable ink. They use the "give away the razor to get the blade business" approach. Businesses have little control of the purchase of these printers since they can be hid in an office supply purchase. Additionally, these ink cartridges cost around \$30 and are purchased around most company's purchasing systems and it easy for these to fall through the cracks. Most of these types of printers are localized and off of the radar of the IT departments. Many IT departments see printing as a necessary evil and if it isn't on their network, then it isn't in there purview. When these types of printers break they are simply discarded, causing a repeat purchase and a detriment to the environment.

The second most expensive approach to printing a document is a "Single Function" laser printer. These printers can be localized or put on a network. Although still relatively inexpensive to purchase, they are usually purchased through IT and fall under the control of IT. When these printers break, they are typically fixed rather than trashed. The cost per page on most single function laser printers is still in excess of two cents for black and white and over ten cents for color. In all single function printers, coverage or the amount of ink or toner placed on a page, determines the actual cost. In extensive studies run by HP, they have determined that the average page typically has a five percent coverage ratio. Obviously, coverage is determined by the type of application that is run on a printer.

The final and least expensive cost per page for localized short run printing is the "Multi-function" or "All in One" printer. These units are the most expensive to acquire, but typically cost less than one cent per page for black and white and range from five cents to ten cents for color. This type of printer is almost always located on the network. Pricing per page on these units is determined on monthly volume. The more volume the lower is the cost. When describing a multi-function printer and its functionality, it usually starts with a glass on top for scanning. Other features typically included are document feeders, many types of finishing options like sorting, stapling, hole-punching, etc., multiple drawers for multiple sizes of paper, fax capability and email. These products are feature rich, sometime too much so, that companies wind up

buying more product than they need. A classic example of overbuying is the 11 x 17 paper feature. This feature is only used by five percent of the pages produced, yet is available on ninety five percent of the multi-function machines. This is a very costly feature, since it requires a larger machine, with a larger glass and engine. This feature typically adds fifty percent or more to the cost of the equipment.

### On-Demand Printing

On-demand printing has been around for years and provides the next step for printing at even a lower cost. This type of printing requires more volume than a typical locally produced job, but is still a very viable option when a medium volume of prints are needed. This volume can vary, but typically one hundred or more of the same original and less than one thousand. Sometimes, on-demand produces one off or variable printing. This type of printing is typically the same original document with slight variations such as names and addresses. These types of jobs require proofing and delivery making them more complicated than localized printing and it typically depends on the size of the company on whether the job will go off campus or stay local in the company's in-house printing department. Many vendors offer on-demand printing and in metropolitan areas, are usually not far away. In no way can localized printers perform at the quality and price that an on-demand printer can produce on a larger project.

### Offset Printing

Finally there is offset printing. The oldest and most traditional style of printing, offset still provides the highest quality at the lowest cost depending on volume. You cannot produce any type of variable printing on offset and it usually requires a minimum of one thousand or more of the same original to produce product at a lower cost than on-demand. This type of printing requires plate making, proofing and delivery and almost always is done off campus regardless the size of the company.

### Managed Print

Obviously, there are a myriad of ways to print documents. The problem in most businesses is the lack of control to manage this output. Most of the outside or off-campus printing is managed through purchasing and can be controlled through a bidding process. But, the local printing is where control is lost. Prints are going on in every department on all types of equipment. Ink Jet and Laser Printers are being used without any reporting structure. This can and does produce enormous waste in time and money as well as being extremely detrimental to the environment. Most companies have the purchasing of printers split between two different departments, single function printers to the It group and multi-function printers fall under facilities. How did this unusual circumstance begin in the first place?

Let's go back a few years ago when facility managers were in charge of purchasing copying equipment. It wasn't that long ago copiers only copied and were not used as printers. As these products became more sophisticated, the printing feature was

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added. When this happened, most businesses didn't change the structure of purchasing. Since printers early on went on the network, they became part of the IT infrastructure and were placed under the IT department to purchase and manage. Since copiers didn't go on the network, they were not part of IT. Now the two products have merged and still in most companies the management of the printing process has not changed. This has added stress between purchasing and IT. Sometimes the choice is made based on price rather than on ease of management by the IT group. Conversely, the IT group sometimes chooses printers based on the ease of putting on the network rather than cost of operation. When purchasing printers, either single or multi-function, both decisions should be studied before purchasing. Both groups should work together to leverage the best of both worlds reducing cost while saving the IT group time and management hassles.

A managed print provider can improve the process of printing by helping oversee the use of all printers within the business. New technologies are available to scan networks to find all of the printers sitting on the network. These scans can find meter readings, network addresses and sometimes determine coverage ratios and other data. These scans normally cannot find locally connected printers and sometimes miss printers that cannot send proper protocol to be seen. Nevertheless, this is a good place to start in locating printers within an organization. The next step in the process is the old fashioned walking the floors. As a MPS provider walks the floors, they can print configuration pages from printers that give detailed information regarding the printers past. These pages will help in determining the rate of coverage, number of cartridges used, total meter count and more.

As the MPS provider walks the floors a mapping should be done showing all locations of printers. This mapping will later be used to determine the best locations for printers, type needed and the optimum number needed. Included in a thorough printing research project should be a meeting with accounts payable to determine the current expenditures for the equipment, service and supplies. Many multi-function machines are leased, while most single function printers are purchased. Costs should be pulled on dollars spent on cartridges for Ink Jet and Laser printers as well as any service calls and maintenance contracts purchased by the company. Once the mapping and data collection is complete, a report can be generated on the current state of printing in the company. Some companies charge for this research while others will do it for free in the hopes of achieving a long term business relationship with the client.

Immediately following this report, a recommendation report should be available demonstrating a more efficient layout and use of printers. Remember all printers are not equal. It makes sense to distribute the most printing to the least expensive device in most cases. However, convenience needs to be a part of the equation and recommendations should include the needs of the people within the department. Cheapest isn't always the best use in printing a document.

To choose a MPS provider, it only makes sense to choose a company that can manage the entire fleet. Without having one company in charge, the company's best interest can be lost by a Single-Function Printer provider trying to move prints to their devices while a Multi-Function Printer provider tries to move prints to their devices. A total management provider should have the company's best interest in mind moving prints to the most practical devices and improving the bottom line.

A quality MPS provider should provide reports quarterly and recommendations semi-annually on ways the company can eliminate prints or move prints to lower cost devices without causing hardships on employees. These reports should include prints by device and new technologies to control printing since these technologies are ever improving. A relationship with a MPS provider should require that the MPS provider continually strive to improve printing within the company's printing environment.

### Document Work Flow

Many people mistakenly confuse document management with the ability to scan and archive documents for later retrieval. Although it is one small part of document management and certainly saves time and money if a document is ever needed again, it should not be confused with a document management system. A quality document management system should be comprised of the former along with an automated process for moving documents from department to department or workflow on the way to the documents eventual archival. Some money can be saved by archiving, but the single biggest cost savings is to allow a document management system to prioritize who sees documents and in what order. Once a document has been reviewed, simply approving and closing the document moves it along a workflow process.

Every department within a business has documents that must be reviewed at a certain stage. Some departments, like accounts payable and receiving, have documents that must be married before a bill can be paid. These types of processes can be automated, thus saving time and the possibility of misplacing documents slowing the process. This slowing can result in lost payment discounts or interruption in the daily workflow process causing friction among staff and lost productivity. Most of the time, when businesses implement a fully automated document management system, they find it difficult to quantify savings. At first, companies have to operate two systems simultaneously until the bugs are worked out in the new system. This causes employees to be frustrated due to the additional workload. Management has to stay steadfast in the implementation process, knowing that the long term benefits will outweigh any short term pain the new system may cause.

Management should avoid trying to take on too much too fast. It is usually recommended to automate one process or department at a time. Most vendors and most companies do not have the manpower to manage simultaneous implementation. By taking it slow and prioritizing the highest need to lowest will ensure a more seamless

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implementation. Once an automated document management system is fully implemented and has been operating for at least six months, businesses will begin to see the full value of the implementation.

Another huge time saver and print saver in the workflow of documents is the use of dual monitors. Anytime a staff member is working with two or more software programs, the use of dual monitors will improve accuracy and conserve time by reducing the amount of toggling between programs. Without a second monitor, most people print from one program to add information to another. This is not only a wasteful and expensive practice, it requires extra time.

### Legacy Files

At some point a determination on whether it makes sense to scan old documents and make them a part of the new document management system. Many businesses take the “from this point forward” approach. This approach avoids the hassle of determining which old files must be scanned, potentially hiring an outside company to orchestrate the scanning and the added cost to accommodate the scanning of the old files. By not scanning the old files, the value of immediate retrieval and the cost savings for no longer needed file cabinets and old boxes will be lost early on. A cost analysis should be done to determine the value legacy file scanning can bring.

### Disaster Recovery

One of the great benefits of electronic archiving is the retrieval of needed documents upon a few keystrokes. This holds true in the event of a disaster. With a well planned system of backup, traditional paper files that would be typically destroyed by fire or natural disaster will be back on line in no time. As many businesses have found out with the increase in hurricanes and other acts of God, having electronic file storage can save a business.

### Environmental Impact

By optimizing your document workflow, a company can have a profound impact on the environment. This impact is primarily found in the reduction in the amount of prints or copies. Here are a few important facts about printing. Each employee prints an average of six wasted pages per day. Forty five percent of printed paper winds up in the trash. In the US each year, we throw away enough paper to heat 50 million homes for twenty years. Along with impact of wasted paper is the lack of recycling print cartridges. We dispose of eight cartridges per second in this country. It takes 3.5 quarts of oil to make one cartridge and by recycling only one cartridge up to four times will save 3.5 pounds of solid waste going into landfills each time.

By designing a document management system that improves paper usage, a company can play its part in saving the environment while saving time and money.